

FIG. 1
(PRIOR ART)

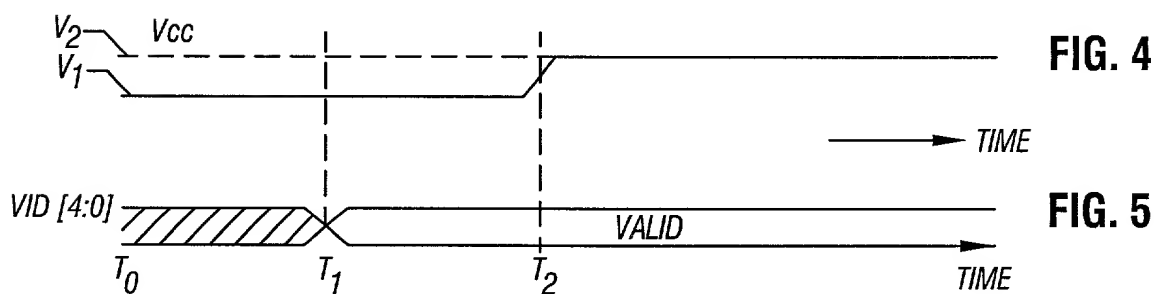


FIG. 4

FIG. 5

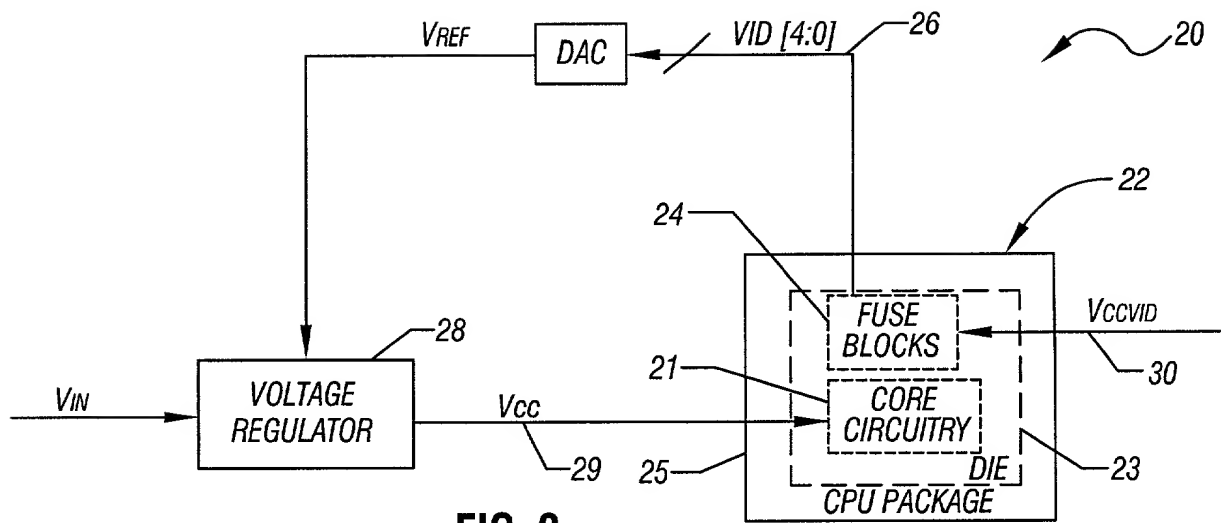


FIG. 2

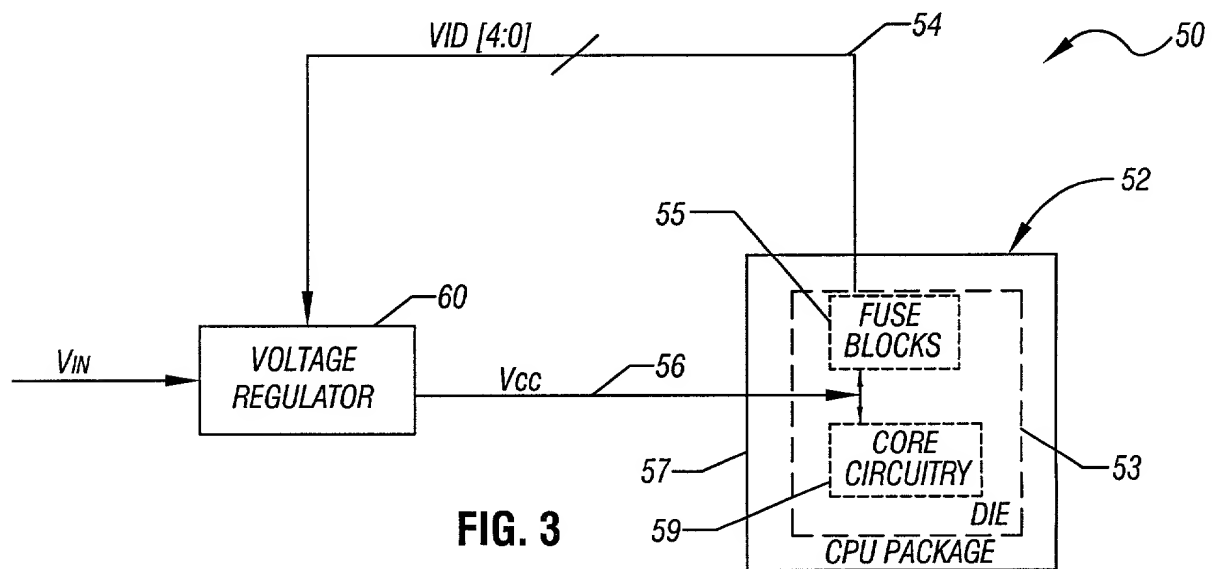


FIG. 3

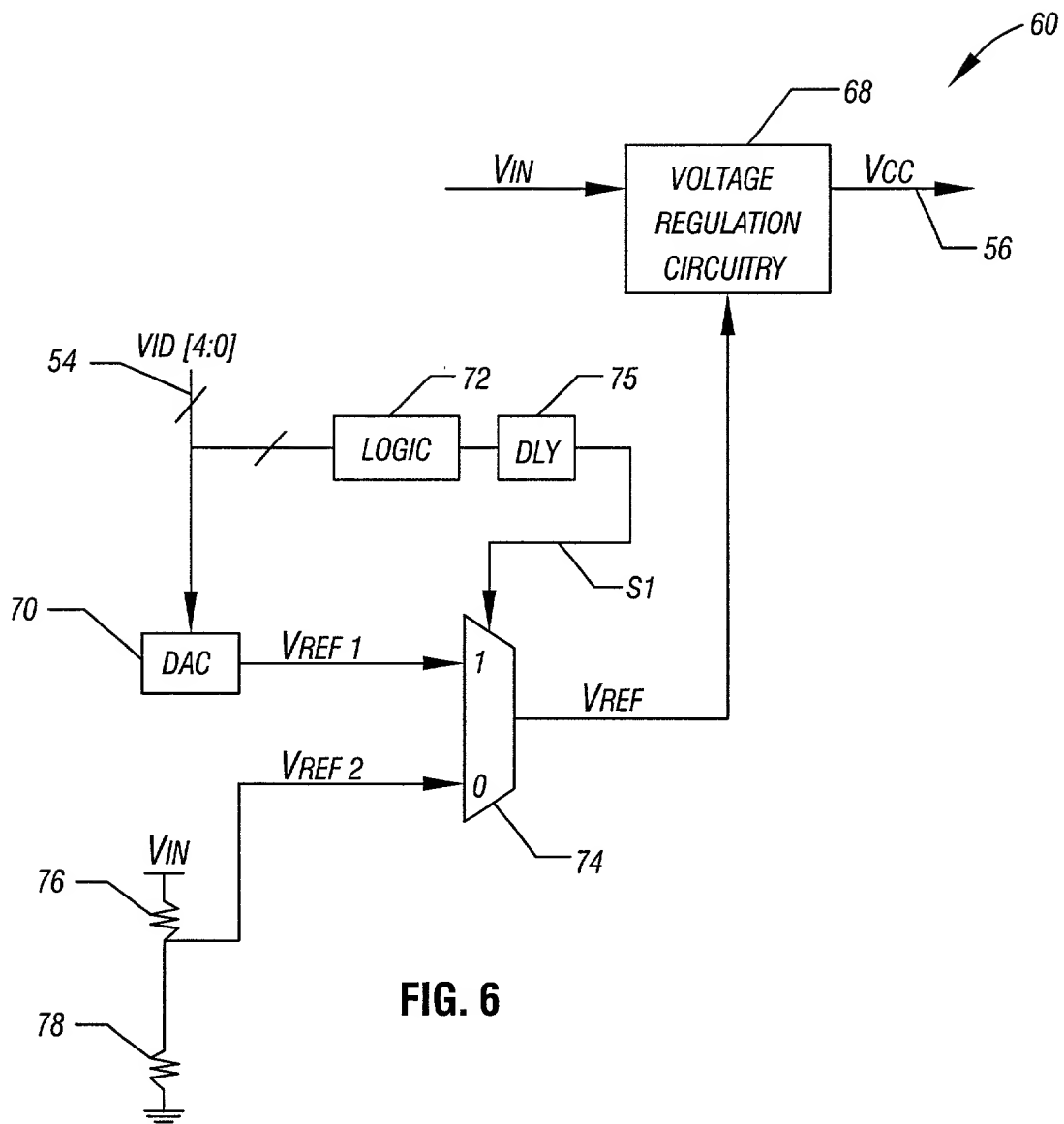


FIG. 6

FIG. 7 is a block diagram of a voltage regulation circuit 80. The circuit includes a voltage regulation circuit 68, a DAC 70, a comparator 82, a delay block 84, and a switch 74. The voltage regulation circuit 68 receives an input voltage V_{IN} and provides a regulated output V_{CC} (56). The DAC 70 receives a digital input $VID[4:0]$ (54) and provides an analog output V_{REF1} (70). The comparator 82 compares the regulated output V_{CC} (56) with a reference voltage V_1 (82). The output of the comparator 82 is delayed by block 84 and then used to control the switch 74. The switch 74 selects between V_{REF1} (70) and V_{REF2} (76) to provide a reference voltage V_{REF} (74) to the voltage regulation circuit 68. The reference voltage V_{REF2} (76) is derived from V_{IN} (76) through a resistor network (78).

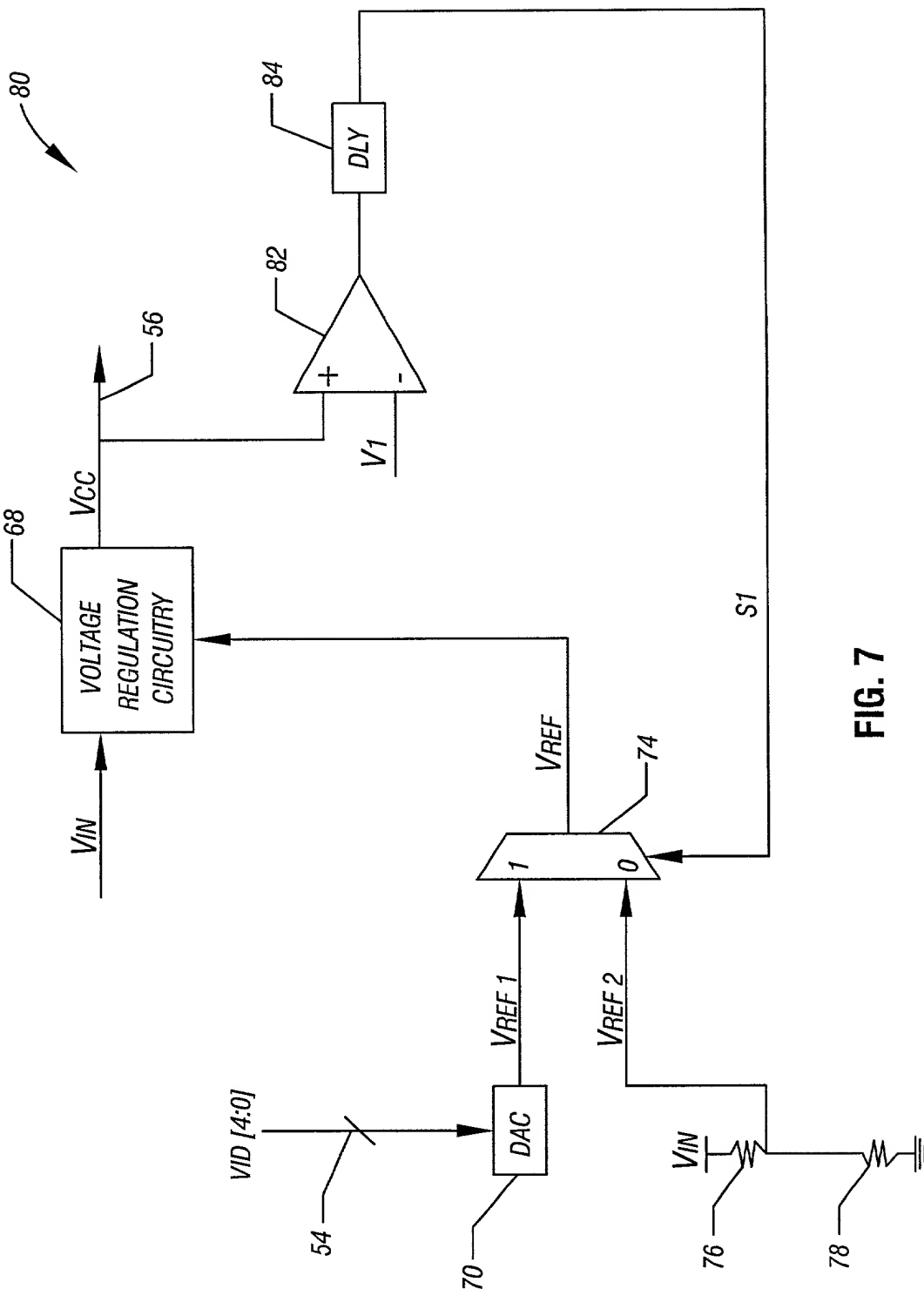


FIG. 7

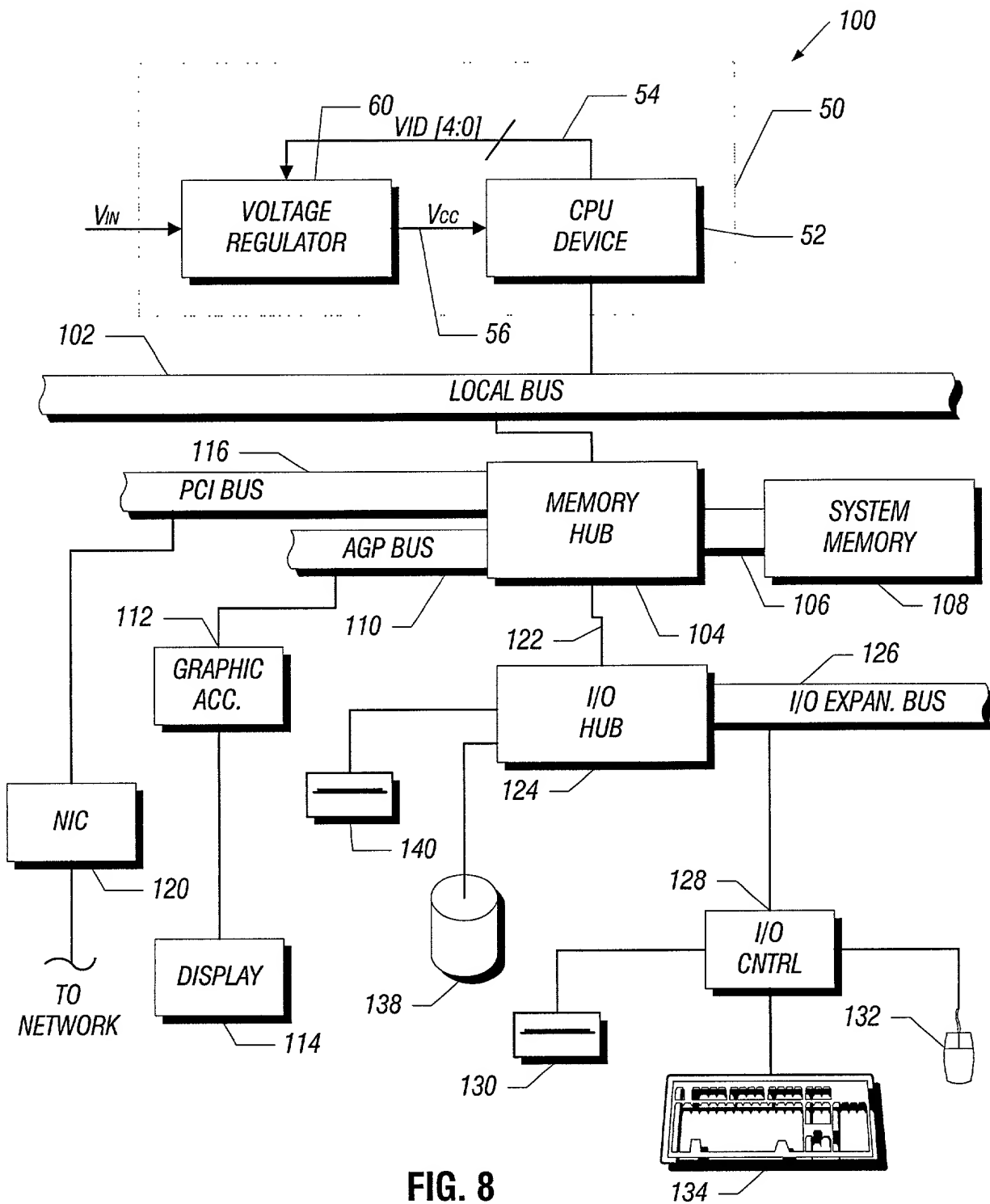


FIG. 8